

NOTES ON THE ALEYRODIDAE OF JAPAN
(HOMOPTERA) IV.

By RYOICHI TAKAHASHI

Mixaleyrodes n. g.

Pupa case: Submarginal area not defined from the dorsal disk. Dorsum with eminent papillae in a longitudinal row on the abdomen, and a pair of longitudinal folds. Thoracic tracheal clefts small, but distinct. Caudal furrow absent. Marginal teeth arranged in a row. Vasiform orifice subcordate, elevated, not notched, without marginal teeth. Venter with no marginal rim.

Genotype.—*Mixaleyrodes polystichi* n. sp.

Related to *Aleurotrachelus* QUAINT. et BAKER, but differs in the presence of distinct thoracic tracheal clefts and in the marginal teeth arranged in a single row, in these characters resembling *Dialeurodes* CKLL.

Mixaleyrodes polystichi n. sp.

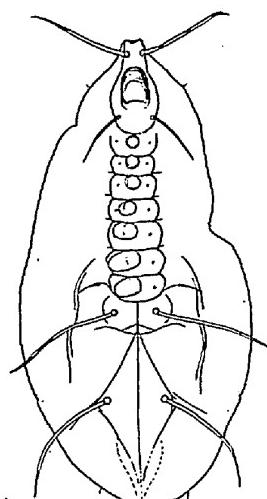
Pupa case: White, with no secretion evident. Elongate, broadest on the posterior part of cephalothorax, about twice as long as wide, narrowed toward the hind end, rounded on the front margin, slightly indented at the hind end, with a few irregular indentations on the margin. Dorsum a little more sclerotized on the median narrow area, lacking distinct markings, with a pair of longitudinal folds, which are reaching the hind margin of the 2nd abdominal segment. Cephalothorax with a median ridge, and 2 pairs of very long stout setae, which are curved, simple, subequal in length and reaching beyond the margin of pupa case. Mid-thoracic suture thin, nearly reaching the margin; metanotum distinctly defined, with one pair of the setae; transverse suture between the thorax and abdomen short, reaching the longitudinal folds. Abdomen with a pair of long stout setae in front of the vasiform orifice and also near the hind end, which are shorter than those on the cephalothorax; abdominal seg-

ments distinct on the median narrow area, each of the basal 7 segments with a large very stout rounded median papilla or tubercle on the posterior part, the papillae on the anterior segments larger, those on the basal 2 segments longer than wide. Margin very narrowly a little more sclerotized, with 2 pairs of usual short setae; marginal teeth very short, but distinct, much wider than long, broadly rounded or nearly triangular, with the tip rounded, arranged in a single row, 14 teeth occupying a space of about 0.092 mm. Thoracic tracheal folds not discernible, the clefts very small, as wide as a marginal tooth, with 1 or 2 small, but distinct, teeth, which are as long as or a little longer than wide, rounded apically, narrower than other marginal teeth and not or slightly protruding beyond the apices of marginal teeth. Vasiform orifice large, longer than wide, subcordate, not notched, elevated, with no marginal teeth, but with tooth-like markings, the anterior marginal area not defined from the 8th abdominal segment. Operculum nearly as long as wide, broadly rounded on the hind margin, constricted basally, narrowed on the distal part, occupying about two-thirds of the orifice. Lingula concealed. Length of pupa case—about 0.69 mm., vasiform orifice excluding the margin—about 0.055 mm., distance between the vasiform orifice and hind end of pupa case—about 0.046 mm.

Hosts.—*Polystichum* sp. and other ferns.

Habitat.—Taihoku, Formosa.

Described from specimens taken by me, October 24, 1935. The types in the collection of the Department of Agriculture, Research Institute, Formosa.



Mixaleyrodes polystichi
n. sp., Pupa case.

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